

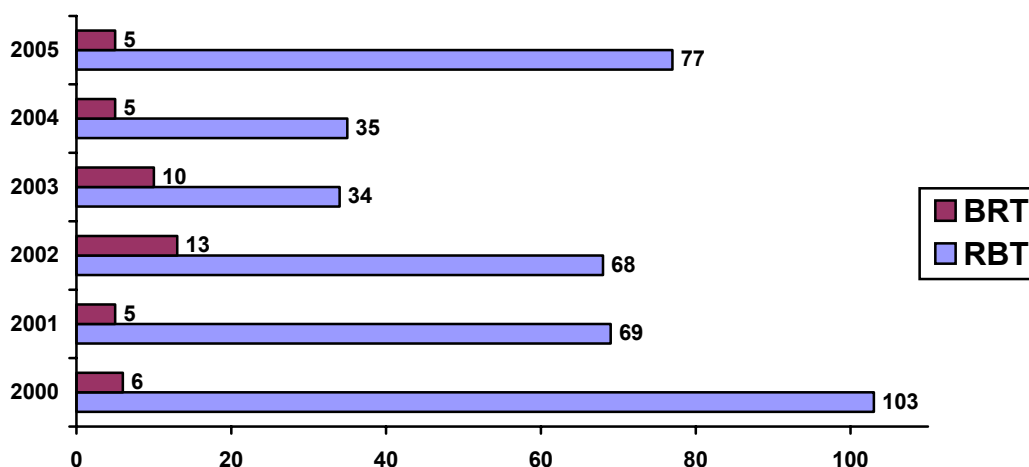


South Fork Holston River Special Regulation Area 2006

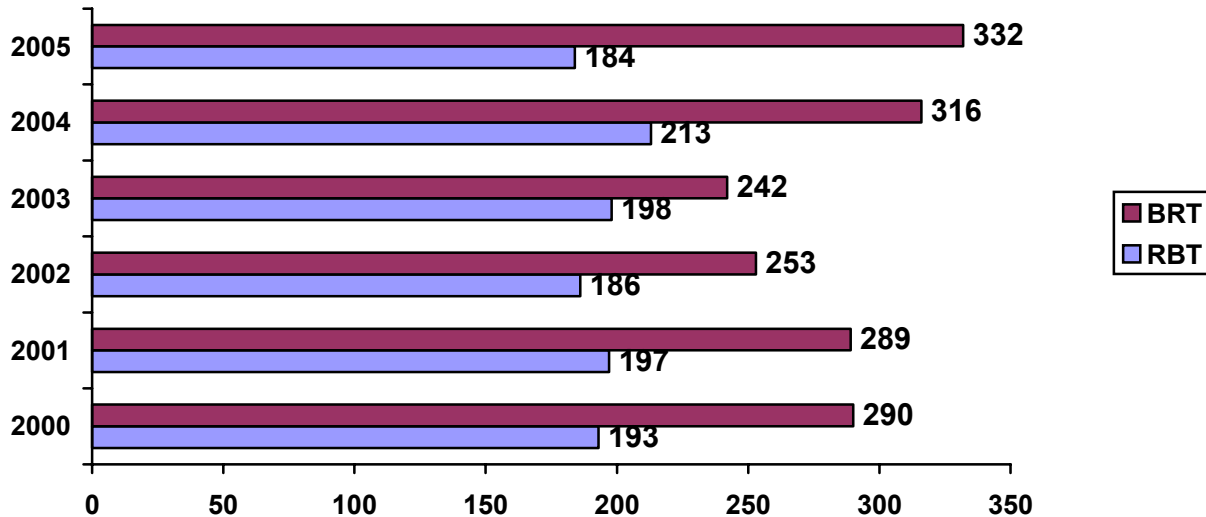
Qualitative sampling

- Four sampling sites, approximately 135-m in length, and one site approximately 70-m in length were sampled using one or two portable (georator) electrofishing units.
- Four sites were located in the special regulation area (two fish per day, 16-inch minimum length, single-hook artificial lure only), and one site was in the catch and release area (no harvest).
- A total distance of 610-m was sampled from the combined sampling sites (5) within the special regulation sections of the South Fork Holston River. Data collected on rainbow trout indicated there were approximately 0.77 rainbow trout collected per meter (N = 471). The average size of the rainbow trout collected was 184-mm total length, and the average weight was 72-g. Data collected on brown trout indicated that there were approximately 0.05 brown trout collected per meter (N = 32). The average size of the brown trout collected was 332-mm total length, and the average weight was 440-g.
- The following graphs and table show summary data of rainbow and brown trout from the special regulation areas from 2000-05.

**Rainbow & Brown Trout Abundances in 100-m of the Special
Regulation Areas 2000-05**



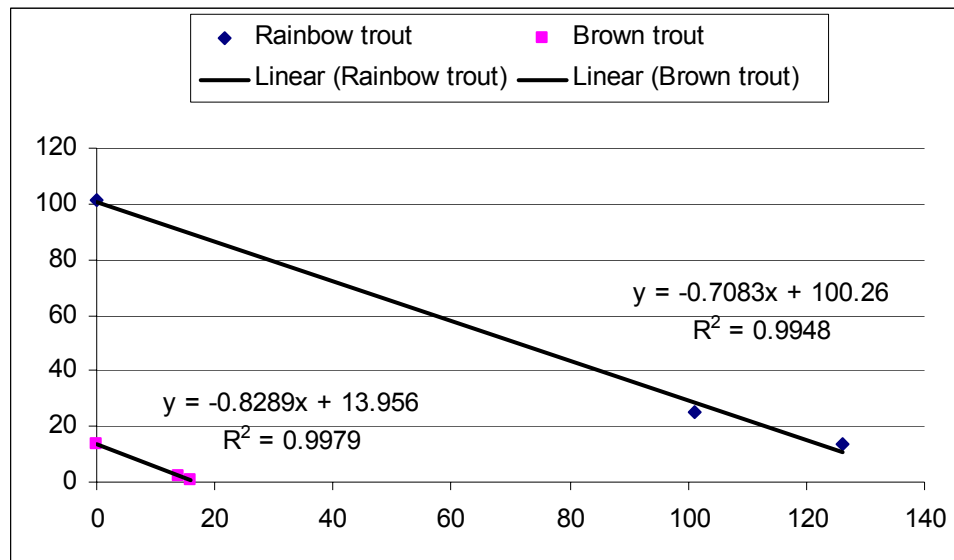
Rainbow & Brown Trout Average Size in mm 2000-05



Species and Year, Numbers of Rainbow or Brown Trout Collected, Average Length (mm), Standard Deviation, Length Range (mm), Number of Sampling Sites, Sampling Gear Type, and Distance Sampled in Meters 2000-05

| Species/Year | Number Collected | Average Length | St. Dev. | Range- (mm) | # of Sampling Sites | Sampling Gear | Distance Sampled (m) |
|--------------|------------------|----------------|----------|-------------|---------------------|---------------|----------------------|
| RBT 2005 | 471 | 184.3 | 56.4 | 70-580 | 5 | Georator | 610 |
| BRT 2005 | 32 | 332.8 | 140.9 | 122-740 | | | |
| RBT 2004 | 241 | 213.1 | 69.8 | 69-500 | 5 | Georator | 675 |
| BRT 2004 | 27 | 316.9 | 127.3 | 186-670 | | | |
| RBT 2003 | 186 | 198.4 | 51.9 | 66-394 | 4 | Georator | 540 |
| BRT 2003 | 53 | 242.8 | 60.7 | 165-470 | | | |
| RBT 2002 | 372 | 186.7 | 68.5 | 62-550 | 4 | Georator | 540 |
| BRT 2002 | 71 | 253.3 | 68.2 | 160-517 | | | |
| RBT 2001 | 374 | 197.5 | 72.6 | 63-555 | 4 | Barge | 540 |
| BRT 2001 | 29 | 289.6 | 77.2 | 110-505 | | | |
| RBT 2000 | 558 | 193.5 | 60.9 | 65-488 | 4 | Barge | 540 |
| BRT 2000 | 37 | 290.5 | 121.2 | 117-612 | | | |

- In 2005 one sampling site, (approximately 135-m long and 8-m wide), covering approximately 0.108-ha surface area was sampled quantitatively (3 pass depletion) using two portable (georator) electrofishing units. In three sampling passes, 137 rainbow trout and 17 brown trout were collected. The average length and weight of rainbow trout collected was 184-mm and 75-g. The average length and weight of brown trout collected was 321-mm and 515-g. Population estimates for rainbow and brown trout within the sampling area were generated using declines in catch per run versus total catch. The population estimates were 141 rainbow and 17 brown trout in the sampling area. Based on average weights and population estimates biomass estimates, are 97 kg/ha for rainbow and 81 kg/ha brown trout.



Management Recommendations

- Future management of the South Fork Holston River Special Regulation Area will focus on population monitoring of trout populations and annual stocking of fingerling brown trout.